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AMENDMENTS TO THE CLAIMS

A complete listing of all claims is presented below.

1. (Cancelled)
2. (Currently amended) A [[The]]multi-zonal monofocal ophthalmic lens ~~of claim 1,~~
comprising:

an optic comprising a plurality of zones, including:
an inner zone having a first optical power;
an intermediate zone surrounding the inner zone and having a second optical power
that is different from the first power by a magnitude that is less than about
0.75 Diopter; and
an outer zone surrounding the intermediate zone having a third optical power
different from the second optical power;
the plurality of zones all disposed such that light entering the entire optic from a distant
point source is focused to substantially a single point;
wherein the third optical power is equal to the first optical power.
- 3-4. (Cancelled)
5. (Currently amended) A [[The]]multi-zonal monofocal ophthalmic lens ~~of claim 1,~~ further
comprising:

an optic comprising a plurality of zones, including:
an inner zone having a first optical power;
an intermediate zone surrounding the inner zone and having a second optical power
that is different from the first power by a magnitude that is less than about
0.75 Diopter; and
an outer zone surrounding the intermediate zone having a third optical power
different from the second optical power;
the plurality of zones all disposed such that light entering the entire optic from a distant
point source is focused to substantially a single point;
an outer zone surrounding the intermediate zone and having a third power wherein the
second power differs from both the first and third powers by a magnitude that is less than or
equal to about 0.75 Diopter.

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6. (Previously presented) The multi-zonal monofocal ophthalmic lens of claim 5, wherein the second power differs from both the first and third powers by a magnitude that is less than or equal to about 0.65 Diopter.

7. (Previously presented) The multi-zonal monofocal ophthalmic lens of claim 5, wherein the inner zone comprises a spherical surface and the intermediate zone comprises an aspherical surface.

8. (Previously presented) The multi-zonal monofocal ophthalmic lens of claim 7, wherein the outer zone comprises an aspherical surface.

9-10. (Cancelled)

11. (Currently amended) A[[The]]multi-zonal monofocal ophthalmic lens of claim 1, comprising:

an optic comprising a plurality of zones, including:

an inner zone having a first optical power;

an intermediate zone surrounding the inner zone and having a second optical power
that is different from the first power by a magnitude that is less than about
0.75 Diopter; and

an outer zone surrounding the intermediate zone having a third optical power
different from the second optical power;

the plurality of zones all disposed such that light entering the entire optic from a distant
point source is focused to substantially a single point;

wherein the ophthalmic lens is an intraocular lens and includes haptics.

12. (Cancelled)

13. (Currently amended) A[[The]]multi-zonal monofocal intraocular lens of claim 12, comprising:

an optic comprising a plurality of zones, including:

an inner zone having a first optical power;

an intermediate zone surrounding the inner zone and having a second optical power
that is different from the first power by a magnitude that is less than about
0.75 Diopter; and

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an outer zone surrounding the intermediate zone having a third optical power different from the second optical power;
the plurality of zones all disposed such that light entering the entire optic from a distant point source is focused to substantially a single point;

wherein the first surrounding zone compensates for optical aberrations in the image resulting from implanted intraocular lens decentration of greater than about 0.4 mm.

14. (Currently amended) The multi-zonal monofocal intraocular lens of claim 13[[12]], wherein the first surrounding zone compensates for optical aberrations in the image resulting from implanted intraocular lens decentration of greater than about 0.5 mm.

15. (Currently amended) A[[The]]multi-zonal monofocal intraocular lens of claim 12, comprising:

an optic comprising a plurality of zones, including:

an inner zone having a first optical power;

an intermediate zone surrounding the inner zone and having a second optical power that is different from the first power by a magnitude that is less than about 0.75 Diopter; and

an outer zone surrounding the intermediate zone having a third optical power different from the second optical power;

the plurality of zones all disposed such that light entering the entire optic from a distant point source is focused to substantially a single point;

wherein the first surrounding zone also compensates for optical aberrations in the image resulting from implanted intraocular lens tilt of greater than at least about 1 degree.

16. (Original) The multi-zonal monofocal intraocular lens of claim 15[[12]], wherein the first surrounding zone also compensates for optical aberrations in the image resulting from implanted intraocular lens tilt of greater than at least about 5 degrees.

17. (Original) The multi-zonal monofocal intraocular lens of claim 15[[12]], wherein the first surrounding zone also compensates for optical aberrations in the image resulting from implanted intraocular lens tilt of greater than at least about 10 degrees.

18-21. (Cancelled)

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22. (Previously presented) A method of designing a multi-zonal monofocal ophthalmic lens, comprising:

providing an optical model of the human eye;

providing an optical model of a lens comprising an inner zone, an intermediate zone, an outer zone, and zonal design parameters, the inner zone, the intermediate zone, and the outer zone disposed such that all light entering the inner zone, the intermediate zone, and the outer zone of the monofocal ophthalmic lens from a distant point source is focused to substantially a single point.; and

adjusting the zonal design parameters based on an image output parameter for one or more non-optimal states of the lens.

23. (Original) A method as in claim 22, further including testing the intraocular lens over a plurality of corneal surface variations and dispositions of optical elements in the eye's optical system using tolerance analyzing techniques.

24. (Original) A method as in claim 22, further comprising repeating at least a portion of the method to modify zonal parameters and achieve a better average optical performance.

25-30 (Cancelled)

31. (Currently amended) A[[The]]multi-zonal monofocal intraocular lens, comprising:

an optic comprising plurality of zones, including:

an inner zone overlapping the optical axis of the lens for producing an image when the intraocular lens is centered on the optical axis of the human eye; and
a first surrounding zone concentric about the inner zone and adapted to compensate for optical aberrations in the image resulting from implanted intraocular lens decentration of greater than about 0.1 mm;

the inner zone comprises a spherical surface and the first surrounding zone comprises an aspherical surface.

32. (Currently amended) A multi-zonal monofocal intraocular lens, comprising:

an optic comprising an optical axis, including:

an outer periphery;

an inner zone overlapping the optical axis for producing an image when the intraocular lens is centered on the optical axis of the human eye; and

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a first surrounding zone concentric about the inner zone and adapted to compensate for optical aberrations in the image resulting from implanted intraocular lens decentration of greater than about 0.1 mm;
the inner zone and the first surrounding zone disposed such that light within the outer periphery and entering the entire optic from a distant point source substantially falls within the range of the depth-of-focus of a spherical lens having an equivalent focal length.

33. (New) A multi-zonal monofocal intraocular lenscomprising:
an optic comprising:
an outer periphery;
a first zone having a first optical power; and
a second zone surrounding the first zone and having a second optical power that is reduced from the first power by a magnitude that is less than about 0.75 Diopter;
the zones disposed such that light within the outer periphery and entering the entire optic from a distant point source substantially falls within the range of the depth-of-focus of a spherical lens having an equivalent focal length.

34. (New) A multi-zonal monofocal intraocular lenscomprising:
an optic comprising:
an outer periphery;
a first zone having a first optical power; and
a second zone surrounding the first zone and having a second optical power that is reduced from the first power by a magnitude that is less than about 0.75 Diopter;

the zones disposed such that light from a distant point source entering the entire optic and within the outer periphery is focused to substantially a single point.

35. (New) The multi-zonal monofocal intraocular lens of claim 34, further comprising third zone surrounding the second zone and having a third optical power different from the second optical power.

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36. (New) The multi-zonal monofocal intraocular lens of claim 34, wherein the second power differs from the first power by a magnitude that is less than or equal to about 0.65 Diopter.

37. (New) The multi-zonal monofocal intraocular lens of claim 34, wherein the first zone comprises a spherical surface and the second zone comprises an aspherical surface.

38. (New) A multi-zonal monofocal intraocular lens, comprising:

an optic comprising:

an optical axis and an outer periphery;

an inner zone overlapping the optical axis for producing an image when the intraocular lens is centered on the optical axis of the human eye; and

a first surrounding zone concentric about the inner zone and adapted to compensate for optical aberrations in the image resulting from implanted intraocular lens decentration of greater than at least about 0.1 mm;

the inner zone and the first surrounding zone disposed such that light from a distant point source entering the entire optic and within the outer periphery is focused to substantially a single point.

39. (New) The multi-zonal monofocal intraocular lens of claim 38, wherein the inner zone comprises a spherical surface and the first surrounding zone comprises an aspherical surface.

40. (New) The multi-zonal monofocal ophthalmic lens of claim 38, wherein the intermediate zone has an optical power that is reduced from an optical power of the inner zone.